MILK MARKETING - U.H.T.

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Stanislaw Berger, in a paper on "Food and Nutritional Patterns Today and Tomorrow" (Food Science and Technology, Vol. 10 [1977] No. 4) (Switzerland) stated:

> "For several reasons the fulfillment of mankind's nutritional needs, is at present and no doubt must in the future be one of the area of major concern in the global strategy if our civilization is going to survive.
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> Throughout history man has faced numerous famines, but neverbefore as today hunger and malnutrition received such wideworld attention.
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> We have approached in a dramatic way towards a new era in which technology, economy, or social aspects of our life are taking over from ecology, which for ages has influenced our nutritional patterns. Food is by now and no doubt will be in the future the most important issue for our survival and well being. Improved technology has become one of the many requirements for our survival."

It is in this context, in line with history, that, in my mind, "improving the application of food technology in the food industry" has become a must, but also a most difficult assignment for everybody working in the food chain or food system. As stated, technology, economy and social become partners.

The specific subject associated with my name on your program is the marketing of UHT milk. With your permission, I will use this specific example or case to illustrate the difficulties or intricacies facing the application of new technology in a complex system, in a society like the one we actually live in.

For those who are not familiar with this UHT milk, let us explain very briefly what it is. Milk, as you know can be pasteurized, which means a heat treatment destroying pathogenic germs but leaving others, which may spoil the product rapidly, mainly if kept warm. Pasteurized milk has a shelf life of approximately 2 weeks at cold temperature.

By increasing the heat treatment we can improve the shelf life and with ultra high temperature (UHT) (140°C) it becomes possible to get a product practically sterile, and have a few month shelf life at room temperature. No refrigeration, therefore, is needed, in the distribution system which is an obvious great advantage. Unfortunately, such a heat treatment does more than killing "bugs" or microorganisms. For the consumers, the main effect is the production of a cook or off flavor, with the result that a special market has to be found or developed for such a product. Therefore, before going ahead in such a

venture (over $1.5 million investment in this case) studies have to be made and these were:

- Choice of a technology
- Market study.

Let us consider, first, and briefly, the choice of the technology. A tour in Europe, including discussions with suppliers, equipment manufacturers and dairy plant operators, lead to the choice of an indirect heating system with the aseptic filling operation in the container you have seen (tetropak).

Importing technology appears a simple process, but it is not always the case, and it is even seldom the case when you deal with biological material. Milk, as many other foods, is the result of a biological activity. It means, therefore, that you deal no more with uniform chemically identical species; you deal with populations, the products differ from one area to an other, from one season to the other, etc. This means that you import equipment, not a process; the technology has to be adapted, developed in many instances and this may be a very costly experience which may take months as well as days. In the case of UHT milk, in Quebec City, such problems were encountered. The process had to be modified and it took weeks and even months before getting satisfactory results. Even in those conditions, the shelf life was not what was expected because of physico-chemical changes in the product with time.

As you can see, in the food industry, even importing technology is a complex problem and improving it is not simpler and cannot be achieved by anybody because of the expertise, capitals required and risks at the end of the line. Most of the small or middle size firms cannot afford such a venture by themselves.

Before making a decision the Laiterie Cité, had a market study performed by a specialized firm. Chronogically this came, obviously, before the technology problems discussed previously. For obvious reasons the firm did not give me a copy of this study, and you surely understand why. After discussion with people concerned and observations, I believe fair to make the following remarks, which I hope, will be of some interest to your group!

First, the market study was useful. It has been a necessary tool in the process of making decisions, right at the beginning. Later on, however, it has been important to forget a bit about it, in that sense that many answers were not there, many situations were not foreseen. In Europe, it took five years to establish a market. Strategy has to be developed with time and events, with reactions and pressures from competitors and consumers.

A key to a great many trends or shifts in American eating and drinking preferences for the last 25 years has been convenience (K. O. Carson, Food Prod. Dev. Sept. 1977). Convenience implies:

- Ease of preparation or use.
- Speed of preparation.
- Higher cost.

UHT milk met those requirements and should constitute a promising new product. But it takes more in some instances.

Those familiar with milk marketing know that, first, consumer's loyalty does not exist, and, secondly, on our continent, milk flavor must be excellent, even uniformly excellent.

People buy milk more for biogenic reasons (as an excellent source of nutrients) not for sociogenic or

psychogenic reasons, as it is the case for a car or a detergent or a suit.

Those are facts which a market study does not always reveal, in specific cases. There are groups of consumers who have not responded as expected. As an example, couples where both, husband and wife were working, did not respond as expected while older people are responding much better than shown by the market study. Baby feeding is becoming a promising market. Those customers will prefer this flavor and are becoming "permanent" ones and a long range, that is excellent. The response has not been uniform from one area to the other. In some regions, sales are excellent while in others they are below expectation and I do not have an explanation except for special cases.

This is probably related to what we might call "special difficulties" which a market study, even the best ones, cannot foresee. I refer, here, to three areas or regions, Montreal, Ontario and U.S. I do not intend to go into details to explain the situation in those cases for many reasons among which an excellent one: those stories are never told in details to an outsider.

In Montreal, with the same strategy as in Quebec City, the response has not been as good. Among the reasons given were tactics or fuss by competitors. Was this behavior unfair or fair? I don't know, but apparently, it has been rather "rough."

In Ontario, it has been short and sweet, it has not been accepted as a protective measure for their milk producers. It has not been simpler in U.S. as it has been almost impossible to ship samples, except via the embassy according to what has been told.

It can be concluded that, only an improved technology is not enough. When politics, particular behaviors come into the picture, it becomes a tough struggle.

An other factor in food distribution which is important and too often forgotten is the influence of some professional in the health and nutrition fields. It is not easy to get their support but they can easily throw you out of business by any statement. How to reach these people? How to convey to them the right information? That has been, is and will be an acute problem for the whole food system. With statistics, I can prove to you anytime that there is a correlation between pickles and cancer, between margarine disappearance and heart incidents, etc. It is easy to play with figures but not so easy to establish a cause to effect relationship.

To conclude, and always using the UHT milk as an example, improving the application technology in the food industry, is an open question, a problem with many facets. Success has been obtained with this type of milk, a premier on this continent, but lessons have been taught and problems have yet to be solved. Among them lets mention:

- A greater uniformity in the product. Uniformity, I am not teaching you something new, it is a must in the food or other businesses.

- The actual container, besides being very expensive, presents some drawbacks when handled by children and even by adults. Milk has a tendency to pop out.

- The flavor, for many consumers constitutes a handicap. Improved technology has resulted in better results and there is hope for the best.

- Its high water content (87 percent) may constitute a handicap, economy wise, in transport and handling.

This case teaches also that for improved technology, to become a success in business, it requires teamwork, team efforts from one end to the other of the chain.

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METRIC CONVERSION AND THE FOOD RETAILER

by
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Metric conversion in Canada and the United States is progressing on a voluntary basis, with each sector of our economies conducting its conversion program in general coordination with its manufacturers and its customers, according to guideline dates agreed and published from time to time.

The two significant parts of that statement are the "voluntary basis," which means that each company must plan and implement its own conversion program in its own way, at its own expense; and the "general coordination" which requires that each company know what metrication changes are taking place in outside areas that affect its own operation.

Let's deal first with the "voluntary" aspect.

For the retailer to convert economically he must do it in the shortest possible time; he must avoid significant capital expenditures; and he must keep his training and awareness effort to the minimum required to do the job properly.

Except for private brands, the retailer has little or no control over the pace of product conversion, which is determined by the manufacturer or the supplier. So the "voluntary" aspect applies to his "voluntary" reaction to product changes, and his "voluntary" absorption of his own conversion costs.

One example of such costs is the movement and control of dual inventories through his warehouses, his ordering and distribution systems, and his stores. Another is the proper preparation of his people and his customers for the introduction of metric products at the store. With adequate notice, consultation and planning, through his metrication coordinator, he can minimize these costs. He cannot, however, make them disappear.

Conversion costs for the retailer are not offset by any real or early return on investment. He cannot therefore, be expected to lead the nation into the promised land of metric conversion, extolling its undoubted virtues and ultimate advantages to our peoples.